State of Florida

2005 Hurricane Season

8 Hurricanes in 14-Months!
4 Major In 2004
4 Major In 2005
Plus EMAC Task Force to MS

Chuck Hagan, Chief
State Unified Logistics Section

2005 Storms
State Operations

- **TS Arlene**
- **TS Tammy**
- **Hurricane Dennis**
- **Hurricane Katrina –**
  Florida Operations
- **Hurricane Katrina –**
  Mississippi Task Force EMAC Mission
- **Hurricane Ophelia**
- **Hurricane Rita**
- **Hurricane Wilma**

Tropical Storms

- **Tropical Storm Arlene:** Landfall was near Pensacola on June 11th, 2005 around 3:00 PM EDT with maximum sustained winds near 60 mph.
- **Tropical Storm Tammy:** Tammy made landfall near Mayport, Florida, around 7:30 PM EDT on October 5th. Maximum sustained winds at landfall were near 50 mph

Hurricane Dennis

Hurricane Dennis: Landfall on Santa Rosa Island between Navarre Beach and Gulf Breeze about 1930 UTC July 10th maximum sustained winds at 120 mph (Category 3).

- Main impacts were: significant storm surge well to the east of Dennis's landfall along the big bend, 6-10 feet of storm surge.
- Significant damage to Navarre Beach as a result of 6-6.5 feet of storm surge
- Heavy rainfall in the big bend of 5-12 inches produced flooding along rivers and tributaries.
- The lower Keys received about 18 hours of tropical storm conditions on July 8-9 as Dennis's eye passed about 100 miles to the west of Key West.
- Along with (Charley, Ivan, Jeanne and Wilma) Dennis makes the list of being in the top five major hurricanes to impact Florida in a little over 14 months time.
- Since reliable records have been kept (1851), no single state has been impacted by this many major hurricanes (Cat 3 strength or greater) within two hurricane seasons.

Hurricane Dennis

- **State Logistics Staging Areas at Eglin AFB**
- Water = 352 Trucks - 1,672,000 Gallons
- Ice = 306 Trucks - 12,240,000 Pounds
  - Transferred 21 trucks of Ice from Bartow State Warehouse (last year's sto
- **MRE's = 10 trucks or 217,440 meals**
- **Tarps = 12 trucks or 40,188 tarps**
- Generators, pumps, light towers, forklifts, pallet jacks, electricians, mechanics, refueling trucks. (FDEM)
  - 130 Generators (25 kW to 750 kW)
  - 98 Portable Light Towers (For POD's – 2 per site)
  - 80 High capacity Pumps
  - 104 Forklifts (Most for POD's)
  - 115 Pallet Jacks (Most for POD's)
- **Rolled Roofing Materials = 5 trucks**
- **Furring strips = 12 Bundles, and 4 pallets of roofing nails to support Voluntary Agency**
- State Logistics Staging Area Transportation Assets
  - 3 refueling trucks
  - 15 Roll-back Trucks for spot delivering equipment
  - 15 Semi Trucks with various trailer for local movement (In addition to water, ice and other trucks delivering supp

Hurricane Katrina
Florida

- Landfall was along the Miami-Dade / Broward coastal border at 6:30 PM EDT on August 25th with maximum sustained winds near 80 mph (Category 1).
- Highest sustained winds recorded were 75 mph at Virginia Key, with a peak gust of 97 mph recorded at Homestead General Airport.
- Main impact was heavy rainfall, with over 15 inches of rainfall occurring across southern Miami-Dade within about 12 hours' time.
  - Resulted in widespread flooding of structures, vehicles, and farmland across south Miami-Dade. Wind gusts
- Katrina produced about 10 hours of tropical storm conditions in the lower Keys. A tornado touchdown produced significant damage in Marathon.

Hurricane Katrina
Florida

- **State Mobilization Area at West Palm Beach Fairgrounds**
  - Two C-130 Medivac sorties to evacuate patients from Florida Keys
- **State Logistics Staging Area at Homestead ARB**
  - Deployed a Type I LSA Package
    - Logistics Management and Incident Support Team
    - 45 - Generators
    - 35 - 4000 watt light tower sets
    - 98 – Forklifts
    - 120 – Pallet Jacks
    - 12 – Pumps
    - 5 – Field HVAC Units
  - Commodities
    - Water - 50 Trucks
    - Ice – 50 Trucks
  - State Mobile Command Vehicle
  - Logistics Support Units
  - 25 Truck Shuttle Fleet

Hurricane Katrina
Mississippi EMAC Mission

- Katrina made landfall on the Gulf Coast the morning of Monday, August 29 in the State of Mississippi.
- The State of Florida sent over the following 30-days 6,404 emergency response and support personnel under EMAC to support the six southern counties of the state.
- Three Florida USaR Task Forces arrived in MS four hours after landfall to begin operations.
- Within the first 24-hours, 650 Florida law enforcement, fire, EMS and logistics support personnel began support operations

Hurricane Katrina
Mississippi EMAC Mission

- Over 30-days:
  - Two Florida NIMS Type I Incident Management Teams provided overall command and control out of Stennis Space Center
  - Two Florida NIMS Type I Incident Support Teams provided logistics management
  - Six Florida Type II, and three out-of state Type III Incident Management Teams provided support to the six southern counties at their respective county EOC's
  - Two Florida DMAT Teams established emergency medical support
- Total Missions (EMAC) - 278

Hurricane Katrina
Mississippi EMAC Mission

- **Established a Unified Logistics Staging Area at Stennis NASA Facility**
  - Two Type I State LSA Management Teams (IST)
  - Coordinated movement orders and managed
    - Water = 964 Trucks = 4,579,000 Gallons (768 Florida purchased trucks)
    - Ice = 940 Trucks = 37,600,000 Pounds (457 Florida purchased trucks)
    - MRE's = 114 Trucks (6 Florida trucks)
    - Medical Supplies in coordination with ESF-8
  - Purchased on behalf of MS and managed
    - Shelf Stable Meals = 210,000 (11 Trucks)
    - Tarps = 67,200 (28 trucks)
    - Quick Lime = 113 tons (6 Trucks)
    - Bleach (Sodium Hypochlorite) = 6 Trucks
    - Blankets = 24,000 units
    - Administrative supplies for affected counties
    - Essential tools and equipment for affected counties
    - Computer network lease for Joint Task Force operations center at Stennis

Hurricane Katrina
Mississippi EMAC Mission

- **Deployed and managed**
  - Type I+IV, 1200+ person Base Camp at Stennis NASA for emergency workers
  - Two Type III, 500 person Life Support Package (Catering and showers) for USaR Teams
  - Established the State Logistics Movement Coordination Center with LEO escorts
  - Deployed two Type I LSA Packages
    - Logistics Management and Support Team
    - 97 – Prime Power Generators
    - 93 – 4,000 and 6,000 watt light tower sets
    - 154 – Forklifts
    - 125 – Pallet Jacks
    - 25 – Flood Pumps

Hurricane Katrina
Mississippi EMAC Mission

- **Deployed and managed** **continued**
  - Vehicles and trailers
    - State Mobile Command Vehicle
    - Two Logistics Support Units
    - 25 Truck Shuttle Fleet at LSA
  - Communications and data
    - 5 FDEM Owned satellite data systems
    - 6 leased satellite data systems
    - 4 Emergency Deployable, Interoperable Communications Systems (EDICS) establishing an interoperable communications network across the six counties
    - 13 Field Satellite Radio/Telephone syste

Hurricane Ophelia

- Ophelia remained offshore of east-central Florida from September 7-10.
- Ophelia became a Category 1 hurricane on September 8th and remained about 60 miles offshore of Cape Canaveral at its closest approach to Florida.
- Highest sustained winds recorded were 40 mph, with a peak gust of 60 mph, both at Cape Canaveral.
- The main impact of Ophelia was beach erosion along the east central and northeast coasts. One rip current death occurred along Florida's east coast.

Hurricane Rita

- **Hurricane Rita:** Hurricane Rita remained about 50 miles to the south of Key West during the afternoon hours of September 20th.
- Rita intensified from a 70 mph tropical storm at 8 AM EDT on the 20th to a Category 2 hurricane by 2 PM EDT as the eye was passing due south of Key West.
- Maximum sustained winds of 62 mph with a peak gust of 76 mph were reported at Key West.
- Tropical storm conditions persisted for more than 12 hours in the lower Keys on the 20th.
- Rita produced a storm tide of 5 feet in Key West around midnight on September 21st, well after the closest approach of the hurricane.
- Logistics resources mobilized for Katrina were applied to Rita response operations.

Hurricane Wilma

- Landfall was near Cape Romano in southern Collier County at 6:30 AM EDT on October 24th with maximum sustained winds near 125 mph (Category 3).
- Hurricane force winds over all of south Florida, as Wilma entered the state at Category 3 strength and exited about 5 hours later near Jupiter Inlet at Category 2 strength (105 mph).
- Widespread minor to moderate structural damage, large field of hurricane force winds, and power outages were extensive
- Category 3 strength impacted all of the major metropolitan areas of Miami-Dade, Broward, Palm Beach, and Martin Counties.
- Hurricane force winds also spread over the entire Florida Keys, but storm surge was the most significant impact along the island chain.
- Peak storm tides of 6 ½ feet were reported in Key West, which inundated approximately 60% of the city. Storm tide in Marathon was estimated at 7 to 9 ½ feet, with a 5 foot storm tide reported in the upper Keys.
- This surge inundated numerous ground floor slab or block homes throughout the Keys.
- The highest storm surge occurred in the Mainland Monroe County and the Dry Tortugas, where upwards of 13 feet of storm surge.

Hurricane Wilma

- **<u>RESOURCES DEPLOYED and MANAGED:</u>**
- **96 County Points of Distribution (POD) Across 13 Counties**
- **Water:**
  - 1,701 Truck Loads = 8,079,750 Gallons
- **Food:**
  - 556 Truck Loads = 11,676 Shelf Stable Meals
- **Ice:**
  - 1,398 Truck Loads = 55,920,000 Pounds (27,960 Tons)
- **Tarps:**
  - 89 Truck Loads = 311,500 Individual Self Help Tarps
- **TOTAL: 3,744 Trucks of Commodities**
- **Population Served: 4,863,633**

Hurricane Wilma

- **CRITICAL RESOURCES *(PARTIAL LISTING)***
  - **Prime Power Generators 118**
  - **Flood Pumps 19**
  - **Fork-lifts 158**
  - **Light Plants 123**
  - **Pallet Jacks 180**
  - **HVAC Unit 3**
  - **Cranes 3**
  - **Fuel Trucks 16**
  - **Logistics Air Operations 10 UH-60 and 8 CH-47**
  - **Personnel**
    - **Electricians, fork-lift operators, engineers, management staff**

2005 Summary

- **Evacuations:** 5,585,591 persons
  - Hurricanes Dennis (1,222,073 million), Katrina (411,000 thousand), Rita (411,000) and Wilma (2,800,000 million). For Hurricane Ophelia there were no evacuations ordered. As for Tropical Storms Arlene (295,688) and Tammy had no evacuations ordered.
- **Sheltering:** 203 Shelters, 42,690 persons Sheltered
  - Hurricanes Dennis (32/5,413), Katrina (35/2,001), Rita (12/1,301) and Wilma (124/33,975). These are the numbers, at peak, which include special needs. ***(# *shelters/ 3 sheltered)*
- **Fatalities:** 120 Persons
  - Confirmed reports of 60 fatalities for Hurricanes D
    (13), Katrina (12), Ophelia (0), Rita (0) and Wilm

2005 Summary

- **Power Outages:** 4.6 million customers
  - (Dennis 162,258 thousand, Katrina 883,000 thousand, Rita 24,800 and Wilma 3,551,167 million).
- **Communication Outages:** 3.8 million customers
  - Wire line communication (Dennis-, Katrina - , Ophelia -, Rita - and Wilma-).
- **Boil Water Orders:** 27 counties
- **Critical Facilities:**
  - Medical Hospitals and Mental Treatment Facilities, Nursing Homes, Fire Stations, Law Enforcement Facilities, Schools, Shelters.
- **School Closures:**
  - Every public school in Florida has been closed at least one day this year because of a hurricane threat.

2006 Season

- **CURRENT RESOURCE STATUS FOR 2006 HURRICANE SEASON:**
- Two temporary leased warehouses
  - Live Oak, FL: 132,000 square feet
    - 225 trucks of water (1,068,750 gallons)
    - 14 trucks of tarps (Apx. 49,000 each)
  - Orlando, FL: 55,000 square feet
    - 80 trucks of water (380,000 gallons)
    - 4 trucks of tarps (Apx. 14,000 each)
- Three Cold Storage Leases
  - Jacksonville, FL:
    - 59 trucks of ice
  - Winter Haven, FL (two sites)
    - 208 trucks of ice
- In process of fully automating Statewide Logistics System

Chuck Hagan, Chief
State Unified Logistics Section

Program Administrator
Domestic Security, Critical Infrastructure and Logistics Sections

First State In The Nation!